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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/466,935

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VITALIY ARKADYEVICH LIVSHITS

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EXAMINER

STEADMAN, DAVID J

ART UNIT

PAPER NUMBER

1656

DATE MAILED: 09/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/466,935

Applicant(s)

LIVSHITS ET AL.

Examiner

David J. Steadman

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1656

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 77-84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 77-84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Application

- [1] Claims 77-84 are pending in the application.
- [2] Applicant's amendment to the claims, filed on 6/29/2006, is acknowledged. This listing of the claims replaces all prior versions and listings of the claims.
- [3] Applicant's arguments filed on 6/29/2006 have been fully considered and are deemed to be persuasive to overcome the rejections and/or objections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.
- [4] The text of those sections of Title 35 U.S. Code not included in the instant action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

- [5] Claims 77-84 are rejected under 35 U.S.C. 102(b) as anticipated by Kobayashi et al. (*J Biochem* 98:1007-1016, 1985) as evidenced by Zakataeva et al. (*FEBS Lett* 452:228-232, cited in the IDS filed on 3/31/2000) and Kruse et al. (*Appl Microbiol Biotechnol* 59:205-210).

Claims 77-78 and 81-82 are drawn to a method for producing an L-amino acid using a bacterium transformed with a DNA encoding SEQ ID NO:4, optionally wherein the DNA comprises nucleotides 187 to 804 of SEQ ID NO:3, and optionally wherein the L-amino acid is L-threonine. Claims 79-80 and 83-84 are drawn to the method of claim 77, wherein the bacterium is further transformed with a DNA encoding SEQ ID NO:2,

optionally wherein the DNA comprising nucleotides 557 to 1171 of SEQ ID NO:1, and optionally wherein the L-amino acid is L-threonine.

The reference of Kobayashi et al. teaches an *E. coli* host cell transformed with vector pAB104, which comprises a segment of the *E. coli* chromosome, comprising the region between and including genes *pldA* and *pldB* (p. 1012, Figure 4 and p. 1014, Figure 6). Kobayashi et al. teaches culturing this cell in LB broth and isolating the cell from the medium. See p. 1009, left column, bottom.

The reference of Zakataeva et al. is cited as an evidentiary reference in accordance with MPEP 2131.01 as showing that a characteristic not disclosed in the reference of Kobayashi et al. is inherent. Zakataeva et al. teaches that the *E. coli rhtB* and *rhtC* genes (corresponding to SEQ ID NO:1 and 3, respectively) fall between the *pldA* and *pldB* genes in the genome of *E. coli* (p. 229, Figure 1).

Kruse et al. is cited as an evidentiary reference in accordance with MPEP 2131.01 as showing that a characteristic not disclosed in the reference of Kobayashi et al. is inherent. It is noted that, according to MPEP 2124, a reference can be cited "to show a universal fact need not be available as prior art before applicant's filing date," which facts "include the characteristics and properties of a material or a scientific truism." Kruse et al. is cited as showing that *E. coli* is an L-threonine producing strain, *i.e.*, *E. coli* is not an L-threonine auxotroph, and that an *E. coli* isolated from a medium comprises intracellularly-produced L-threonine. See particularly p. 205, abstract and p. 207, Figure 2.

This anticipates claims 77-84 as written.

While it is acknowledged that the reference of Kobayashi et al. does not expressly teach the recovery of an L-amino acid, e.g., L-threonine, from the culture medium, it is noted that this is an inherent step of isolating the cell of Kobayashi et al. Because the host cell necessarily produces and contains intracellularly-produced L-threonine, by isolating the host cell from the medium, it follows that one is "recovering said L-amino acid from the medium" in accordance with the claimed method.

Claim Rejections - 35 USC § 103

[6] The obviousness rejection of claim(s) 77-80 under 35 U.S.C. 103(a) as being unpatentable over Homma et al. in view of Daum et al. is withdrawn upon further consideration of the rejection. While Daum et al. expressly teaches "*Escherichia coli* strains are particularly preferred" in the L-amino acid production method (column 3, lines 10-11) and the cell of Homma et al. is an *E. coli* cell, there is no suggestion in the prior art of record to motivate one of ordinary skill in the art to use the cell of Homma et al. in the method of Daum et al.

Conclusion

[7] Status of the claims:

Claims 77-84 are pending.

Claims 77-84 are rejected.

No claim is in condition for allowance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Steadman whose telephone number is 571-

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272-0942. The examiner can normally be reached on Monday to Friday, 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached at 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Steadman, Ph.D.
Primary Examiner
Art Unit 1656